Claims

1. Reaction chambers coated with native, synthetically or enzymatically prepared nucleic acids, **characterized in that** the coating ensues with calibrated standard nucleic acids with addition of carrier nucleic acids in a non-covalent manner at chemically or biochemically non-modified surfaces of the inner walls of reaction chambers.

2. Reaction chambers according to claim1, **characterized in that** they are comprised of glass or plastic vessels or of glass capillaries.

3. Reaction chambers according to ~~claims 1 and 2~~ Claim 1, **characterized in that** DNA, RNA, synthetic equivalents of DNA and/or RNA, as well as dU-containing DNA are used as standard nucleic acids.

4. Reaction chambers according to ~~claims 1 through 3~~ Claim 1, **characterized in that** a) for the dilution of DNA standards, a DNA solution is used comprising a minimum sequence homology to the nucleic acid compound to be analyzed, and b) a tRNA solution is used for the dilution of the RNA standards.

5. Reaction chambers according to ~~claims 1 through 4~~ Claim 1, **characterized in that**, as the carrier nucleic acid, DNA of lamda phages is used, which previously is

transferred into easily desorbable fragments of a mean length of about 1 - 2 kb by means of ultrasonic treatment.

6. Method for the reaction chambers according to ~~claims 1 through 5;~~ Claim 1 **characterized in that** calibrated standard nucleic acids and added carrier nucleic acids are directly aliquoted into reaction chambers suitable for enzymatic amplification, and are subsequently non-covalently adsorbed directly in the inner wall of the reaction chamber by means of freeze-drying or vacuum-centrifugating lyophilization.

7. Method according to claim 6, **characterized in that** plastic vessels or glass capillaries are coated.

8. Method according to ~~claims 6 and 7~~, Claim 6 **characterized in that** DNA, RNA, synthetic equivalents and/or RNA, as well as dU-containing DNA are used as nucleic acids.

9. Method according to ~~claims 6 through 8~~, Claim 6 **characterized in that** a) for the dilution of DNA standards, a DNA solution is used comprising a minimum sequence homology to the nucleic acid compound to be analyzed, and b) a tRNA solution is used for the dilution of the RNA standards.

10. Method according to ~~claims 6 through 9~~, Claim 6 **characterized in that**, as the carrier nucleic acid, DNA of lamda phages is used, which previously is transferred

into easily desorbable fragments of a mean length of about 1 - 2 kb by means of ultrasonic treatment.

11. Method according to ~~claims 6 through 10~~ Claim 6, **characterized in that** corresponding reaction chambers are simultaneously coated with a plurality (at least two) of different analyte sequence-specific calibrated nucleic acids, if necessary, or a different cellular or organic origin or originating from different species.

12. Method according to ~~claims 6 through 11~~ Claim 6, **characterized in that** the coating of at least 96 reaction chambers arranged in a microtiter format ensues with at least 12 x 8 sequence-specific standard nucleic acids of decreasing concentrations covering the entire expected concentration range of the analyte nucleic acid to be measured (highest concentration: A1 -12, lowest concentration: H1 - 12).

13. Method according to ~~claims 6 through 12~~ Claim 6, **characterized in that** the coated reactions chambers are closed standing upright in an appropriate carrier box receiving at least 96 vessels.

14. Method according to ~~claims 6 through 13~~ Claim 6, wherein, apart from the calibrated nucleic acids, at least two specific marked or unmarked oligonucleotides acting as primers or probes, the carrier nucleic acid and further reaction components required for the enzymatic amplification are contained in the reaction chambers in a lyophilized form, or specifically marked or unmarked

oligonucleotides acting as primers or probes, the carrier nucleic acid and further reaction components required for the enzymatic amplification are contained in separate vessels without nucleic acid standard in a lyophilized form.

15. Use of the reaction chambers coated with nucleic acids according to ~~claims 1 through 14~~ Claim 1 in test kits for the detection of selected nucleic acids in biological substances.

16. Use according to claim 15, **characterized in that** said test kits are comprised of at least one ZeptoStrip (octet strip of closed reaction chambers coated with eight different nucleic acid concentrations) closed with a film / foil, of at least two oligonucleotides, as well as one carrier nucleic acid.